

Amendment

Reply to Office Action dated November 7, 2008

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### REMARKS

The foregoing amendments and these remarks are in response to the Office Action dated November 7, 2008. Applicant hereby requests a one month Extension of Time. The Commissioner is hereby authorized to charge the necessary fees to Deposit Account No. 50-0951.

At the time of the Office Action, claims 1, 2, 6, 7 and 12-21 were pending. In the Office Action, an objection was raised to claim 21. Claims 1, 12-19 and 21 were rejected under 35 U.S.C. §102(b). Claims 1, 2, 6, 7, 12-19 and 21 were rejected under 35 U.S.C. §103(a). The objections and rejections are discussed in more detail below.

#### I. Claim Objections

In the Office Action, claim 21 was objected to for an informality. Appropriate corrections are made herein, and withdrawal of the objection is thus respectfully requested.

#### II. Rejections to the claims based upon Art

Claims 1, 12-19 and 21 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,873,721 to Willoughby (hereafter "*Willoughby*"). Claims 1, 2, 6, 7, 12-19 and 21 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,662,473 to Rassoli ("*Rassoli*") in view of U.S. Patent Publication No. 2001/0021498 to Osorio et al. ("*Osorio*"). Applicant submits that the claims are patentable over these references.

Claims 1 and 14 recite a prosthetic dental abutment plastics coping. In addition, claims 1 and 14 now recite that the coping is adapted to be rotatably mounted to an abutment with 360 degrees of freedom.

Regarding the rejection of claims 1, 12-19 and 21 as being anticipated by *Willoughby*, there are key differences between the coping disclosed in *Willoughby* and the presently claimed coping.

First, it is worth clarifying the terminology relating to "abutment" and "coping". The Office Action of June 26, 2007 asserted that *Willoughby* discloses a healing collar 58 having a base 60 adapted to receive a plastics sleeve 62, this sleeve 62 being the nearest equivalent to the "coping" as claimed (see Figure 1 of *Willoughby*). In Applicant's response it was argued that the sleeve 62 is straight and therefore not anatomically resemblant to a tooth. The latest Office Action

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refers to "a coping 22 capable of being used with a prosthetic dental abutment 44" in *Willoughby*, with reference to Figure 13. However, item 22 in *Willoughby* is a custom made metal abutment, milled from titanium blank 66, not a coping.

Even if it were possible to equate the *Willoughby* abutment 22 with a coping (referred to hereafter as "the *Willoughby* coping 22"), the *Willoughby* coping 22 is a custom coping, each one being individually manufactured after scanning the implant site concerned (See column 20 of *Willoughby* which refers to "a castable or millable completely customized abutment 22"). The custom coping is supplied to the clinician premounted to an abutment. The end result is an anatomically resemblant coping, but each such coping is custom made via a relatively expensive and time consuming process.

By contrast, the anatomically resemblant coping of the present claims 1 and 14 is selectable from a pre-made range of available plastics copings which are supplied separately from the abutment (which can be a standard abutment). Any of these copings can be mounted to the abutment with a rotatable fit (having 360 degrees freedom). Once the desired rotary alignment is achieved, the "stable retaining joint" is engaged.

The *Willoughby* coping is not made from plastics, nor would there be any motivation to make it from plastics. Each *Willoughby* coping 22 is individually milled from a titanium blank 66 (see Figure 13 of *Willoughby*) as part of the final restoration. Plastics copings would only be used where a lost-wax or burn-out process or the like is to be used, and then only as a master to the final restoration in, for example, titanium or ceramics as taught by *Willoughby*.

The *Willoughby* coping 22 is not adapted to be rotatably mounted to an abutment with 360 degrees of freedom, nor would there be any motivation to do so. Each *Willoughby* coping is custom made and therefore there is no need for such a coping to have rotary freedom of movement on the abutment. The coping will already have been made with the correct rotary orientation for placement on the abutment. In fact for this reason, it is necessary for the *Willoughby* coping to be mounted on the abutment with a specific rotary orientation. As stated at column 50 line 50 of *Willoughby* "it is important to remember that these premachined titanium blanks 66 fit precisely to the base 10 because these components have been CNC milled together in order to align the anti-rotational mechanism 24 thread hole and notch 40 correctly."

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Regarding the threading shown in Figure 12 of *Willoughby*, it is observed that this threading enables relative rotary movement between the abutment 22 and the base 10. This movement is not between a coping and an abutment. Furthermore, movement with 360 degrees of freedom is not possible in view of the anti-rotational mechanism 24 mentioned above. Furthermore, the movement is not even true rotary movement, instead it is axial movement along a helical path by virtue of the screw thread.

For at least the reasons set out above, the amended claims are patentable over the cited references.

Regarding the rejection of claims 1-2, 6, 7, 12-19 and 21 as being unpatentable over *Rassoli* in view of *Osorio*, *Rassoli* is directed towards an abutment, not a coping. The Office Action states that in *Rassoli* et al, the coping is called abutment pattern and the abutment is called a base. However, at column 3, lines 7-15 of *Rassoli*, it can be seen that "a custom abutment" is made in which either a metal replica of the "abutment pattern" is cast on and bonded to a base, or "the base and abutment of the final casting are integral".

Like *Willoughby*, both the *Rassoli* and *Osorio* abutments are custom made. The "abutment pattern" 11 of *Rassoli* is not anatomically resemblant. *Osorio* discloses an anatomically resemblant "customized dental abutment". Consequently, a combination of these disclosures, if it were possible, would result in an anatomically resemblant customized dental abutment of the type disclosed in *Willoughby*.

For the foregoing reasons, claims 1 and 14 are believed to relate to patentable subject matter, and to be in condition for allowance. The dependent claims are believed allowable because of their dependence upon an allowable base claim, and because of the further features recited.

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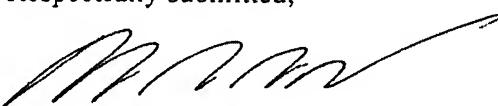
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**III. Conclusion**

Applicant has made every effort to present claims which distinguish over the prior art, and it is thus believed that all claims are in condition for allowance. Nevertheless, Applicant invites the Examiner to call the undersigned if it is believed that a telephonic interview would expedite the prosecution of the application to an allowance. In view of the foregoing remarks, Applicant respectfully requests reconsideration and prompt allowance of the pending claims.

Respectfully submitted,

Date: 3-9-09

  
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